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TO:PATRICIA VOLPE
Location:Suite 804
Art Unit : 3600
Friday, April 30, 2004

Case Serial Number: 10/728221

From: Etelka Griffin
Location: EIC 3600
PK5-Suite 804
Phone: 308-4211

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Search Notes

LITIGATION SEARCH

Source: Legal > Area of Law - By Topic > Patent Law > Patents > U.S. Patents > **Utility, Design and Plant Patents**
Terms: **patno=6146310** (Edit Search)

356744 (09) 6146310 November 14, 2000

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

6146310

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Link to Claims Section

November 14, 2000

Adaptive automated transmission downshift control

REISSUE: December 5, 2003 - Reissue Application filed Ex. Gp.: 3681; Re. S.N. 10/728,221 (O.G. March 2, 2004)

APPL-NO: 356744 (09)

FILED-DATE: July 19, 1999

GRANTED-DATE: November 14, 2000

CORE TERMS: downshift, engine, sub, transmission, skip, ratio, automated, shaft, indicative, input ...

ENGLISH-ABST:

A method/system for controlling downshifting in an automated mechanical transmission system (10) utilized on a vehicle. When a downshift from a currently engaged ratio (GR) is required (ES < ES.sub. D/S), skip downshifts (GR.sub.TARGET =GR-N, N > 1) and then single downshifts (GR.sub.TARGET =GR-1) are evaluated in sequence. If throttle demand is high (THL > REF), skip downshifts are evaluated to determine if they can be completed at no greater than a reference value (ES.sub. DES =ES.sub.DES-DEFAULT +offset), which is higher than otherwise (ES=ES. sub.DES-DEFAULT) allowed.

Source: Legal > Area of Law - By Topic > Patent Law > Patents > U.S. Patents > **Utility, Design and Plant Patents**
Terms: **patno=6146310** (Edit Search)
View: **Custom**
Segments: Appl-no, English-abst, Granted-date, Reissue
Date/Time: Friday, April 30, 2004 - 2:58 PM EDT

Patent Cases from Federal Courts and Administrative Materials

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Patent, Trademark & Copyright Periodicals Combined

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- If applicable, look for all dates.

Edit Search

1 / 1 PLUSPAT - ©QUESTEL-ORBIT - image

Patent Number :

US6146310 A 20001114 [US6146310]

Title :

(A) Adaptive automated transmission downshift control

Patent Assignee :

(A) EATON CORP (US)

Patent Assignee :

Eaton Corporation, Cleveland OH [US]

Inventor(s) :

(A) JANECKE DANIEL P (US)

Application Nbr :

US35674499 19990719 [1999US-0356744]

Filing Details :

C.I.P. of US231951 19990115 [1999US-0231951]
Continuation-in-part of: US6066071

Priority Details :

US35674499 19990719 [1999US-0356744]
US23195199 19990115 [1999US-0231951]

Intl Patent Class :

(A) B60K-041/02 F16H-059/00 F16H-061/04

EPO ECLA Class :

F16H-061/02E2

EPO ICO Class :

R16H-059/24
R16H-059/38

US Patent Class :

ORIGINAL (O) : 477148000; CROSS-REFERENCE (X) : 074335000
477078000

Document Type :

Basic

Citations :

US4361060; US4576065; US4595986; US4648290; US4827802; US4850236; US4852006; US4888577; US4897790; US4916979; US4930078; US4930081; US4933850; US4947331; US5053963;

US5172609; US5219391; US5272939; US5335566; US5389053; US5390561; US5393278; US5435212; US5479345; US5487004; US5489247; US5490063; US5509867; US5533946; US5537894; US5582069; US5582558; US5620392; US5655407; US5706197; US5713445; US5737978; US5743143; US5766111

Publication Stage :

(A) United States patent

Abstract :

A method/system for controlling downshifting in an automated mechanical transmission system (10) utilized on a vehicle. When a downshift from a currently engaged ratio (GR) is required (ES<ESD/S), skip downshifts (GRTARGET =GR-N, N>1) and then single downshifts (GRTARGET =GR-1) are evaluated in sequence. If throttle demand is high (THL>REF), skip downshifts are evaluated to determine if they can be completed at no greater than a reference value (ESDES =ESDES-DEFAULT +offset), which is higher than otherwise (ES=ESDES-DEFAULT) allowed.

Update Code :

2000-44

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Patent Number :

US6146310 A 20001114 [US6146310]

Application Number :

US35674499 19990719 [1999US-0356744]

Action Taken :

20040302 US/RF-A
REISSUE APPLICATION FILED
EFFECTIVE DATE: 20031205

Update Code :

2004-11

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1 / 1 CRXX - ©CLAIMS/RRX

Patent Number :

6,146,310 A 20001114 [US6146310]

Patent Assignee :

Eaton Corp

Actions :

20031205 REISSUE REQUESTED

ISSUE DATE OF O.G.: 20040302
REISSUE REQUEST NUMBER: 10/728221
EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 3681

Reissue Patent Number:

Query/Command : file inpadoc

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1 / 1 INPADOC - ©INPADOC

Patent Number :

US 6146310 A 20001114 [US6146310]

Title :

Adaptive automated transmission downshift control

Inventor(s) :

JANECKE DANIEL P [US]

Patent Assignee (Words) :

EATON CORP [US]

Application Details :

US 356744/99-A 19990719 [1999US-0356744]

Priority Details :

US 356744/99-A 19990719 [1999US-0356744]
US 231951/99-A2 19990115 [1999US-0231951]

Intl. Patent Class. :

F16H-061/04; F16H-059/00; B60K-041/02

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Patent Number :

US6146310 A 20001114 [US6146310]

Application Number :

US35674499 19990719 [1999US-0356744]

Action Taken :

20040302 US/RF-A
REISSUE APPLICATION FILED
EFFECTIVE DATE: 20031205

Update Code :

2004-11